

Application. No.: 10/720,841  
Filing Date: November 24, 2003  
Response dated: August 7, 2006  
Reply to Office Action of: February 7, 2006

### REMARKS

Claims 1-20 were pending in this application. Claims 13-18 and 20 have been withdrawn. Claims 1-12 and 19 have been have been rejected. Claims 1 and 19 have been amended. Therefore, Claims 1-12 and 19 are pending in the Application. Reconsideration of the application based arguments submitted below is respectfully requested.

#### Claim Rejections – Non-statutory Obviousness-Type Double Patenting

Claims 1, 6-12 and 19 have been rejected under a non-statutory obviousness-type double patenting as being unpatentable over claims 1 and 2 of U.S. Patent No. 6,699,427. Claims 1, 6 and 7 have been rejected under a non-statutory obviousness-type double patenting as being unpatentable over claims 1 and 2 of U.S. Patent No. 6,878,331. Claims 1, 6, 7 and 19 have been provisionally rejected under a non-statutory obviousness-type double patenting as being unpatentable over claims 1 and 7 of co-pending U.S. Patent Application No. 10/720,833.

Applicants have submitted here with three Terminal Disclaimers in compliance with 37 CFR 1.321(c), along with authorization for the Commissioner to charge the applicable fees, to overcome these rejections.

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Claim Rejections under 35 U.S.C. § 102(e) and §103(a)

Claims 1, 2, 6-12 and 19 have been rejected under 35 U.S.C. §102(e) as being anticipated by Haung et al. (6,699,427).

Claims 2, 3, 4 and 19 have been rejected under 35 U.S.C. § 103(a) as being obvious over Haung et al. (427) in view of Kalnins (4,252,513).

Claims 1-4 and 11 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Kalnins (513).

Claim 5 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Kalnins (513) in view of Shaver (4,444,894) and Ho (5,037,626).

Claim 6 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Kalnins (513) in view of Shaver (4,444,894) and Ho (5,037,626), and in further view of Niwa (5,525,558).

Claim 7 and 10 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Kalnins (513) in view of Hatch (4,166,145).

Claim 8 and 9 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Kalnins (513) in view of Klett (5,744,075).

Claim 12 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Kalnins (513) in view of Prevorsek (5,556,704).

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Claim 19 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Hatch (4,166,145) in view of Kalnins (513).

These rejections are respectfully traversed. Reconsideration and withdrawal thereof are requested.

Haung et al. (427)

In regard to Haung et al. (427), Applicants respectfully offer that Haung et al. (427) is not applicable prior art. Applicants respectfully direct the Examiner to 35 U.S.C. §103(c)(1) which states generally that a reference that qualifies as prior art only under § 102 (e), (f) or (g) shall not preclude patentability of an application when the reference and the application were owned by the same entity.

Applicants respectfully direct the Examiner to the face of the Haung et al. (427) patent showing the assignment of the Haung et al. (427) patent to UCAR Carbon Company, Inc. (UCAR) and the assignment of the current application on April 26, 2004 at reel 015256 and frame 0261 in the PTO Assignment System of the assignment of the inventors' interest in the current application to UCAR. Additionally, Applicants would like to respectfully point out all three of the named inventors in the instant application were named inventors for Haung et al. (427).

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As such, Haung et al. (427) is not applicable prior art and Applicants respectfully request reconsideration and withdrawal of the rejections based thereon.

#### Claims 1-12 and 19

Applicants would like to respectfully point out that, "[t]o establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." MPEP §2143.03 (*citing In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)). "All words in a claim must be considered in judging the patentability of that claim against the prior art." MPEP §2143.03 (*citing In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)).

In regard to Claim 1, amended claim 1 teaches, among other features, a method of forming a composite material. The method comprises combining carbon-containing fibers, a carbonizable matrix material which includes pitch, and a thermoplastic friction additive to form a mixture, heating the mixture to a sufficient temperature to melt at least a portion of the matrix material by applying an electric current to the mixture and applying a pressure of at least 35 kg/cm<sup>2</sup> to the mixture to form a compressed composite material. Support for these amendments can at least be found in the specification as originally filed.

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The cited prior art does not disclose these steps. Kalnins discloses graphite and thermosetting resins not a pitch or thermoplastic additives. The graphite used by Kalnins is known to be a lubricating material. Additionally, the pitch or thermoplastic additives melt to give a low viscosity fluid which retains there fluid properties over a wide temperature rang prior to carbonization temperatures.

Claims 2-12 are dependent back to patentability distinct Claim 1, and include features not disclosed in the prior art. As such, Claims 2-12 are patentable.

In regard to Claim 19, amended claim 19 teaches, among other features, a method of forming a composite material comprising compressing a mixture of carbon fibers, a matrix material which includes pitch, and a thermoplastic friction additive, wherein said additive comprises at least one of a carbide, an oxide, isotropic coke, and combinations thereof. Support for these amendments can at least be found in the specification as originally filed. As previously discussed, Kalnins does not disclose these features. Hatch also does not discuss thermoplastic additives.

Applicants have commented on some of the distinctions between the cited references and the claims to facilitate a better understanding of the present invention. This discussion is not exhaustive of the facets of the invention, and

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Applicants hereby reserve the right to present additional distinctions as appropriate. Furthermore, while these remarks may employ shortened, more specific, or variant descriptions of some of the claim language, Applicants respectfully note that these remarks are not to be used to create implied limitations in the claims and only the actual wording of the claims should be considered against these references.

The Commissioner is authorized to charge any deficiency or credit any overpayment associated with the filing of this Amendment and Response to Deposit Account 23-0035.

Respectfully submitted,

/Phillip E. Walker, 52,336/

Phillip E. Walker  
Registration No. 52,336  
WADDEY & PATTERSON  
A Professional Corporation  
Customer No. 23456

ATTORNEY FOR APPLICANT

Phillip E. Walker  
Waddey & Patterson  
1600 Division Street, Suite 500  
Roundabout Plaza  
Nashville, TN 37203  
(615) 242-2400

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CERTIFICATE OF TRANSMISSION

I hereby certify that this Response and Amendment for Application No. 10/720,841 and filed November 24, 2003 is being transmitted electronically to:

Mail Stop Amendment  
Commissioner for Patents

Art Unit 1732  
Examiner Matthew J. Daniels  
on August 7, 2006.

/Phillip E. Walker, 52,336/

Phillip E. Walker

Registration No. 52,336